

CLAIMS

1. A clinical-result confirming device that performs previous-value checking to check a validity of present examination data of a specimen used in a clinical
5 examination, comprising:
 - an input unit configured to input previous examination data and present examination data;
 - a reference-pattern-group storage unit configured to pre-store a group of reference patterns classified into a
10 plurality of levels;
 - a pattern matching unit configured to select, from the group of reference patterns, a reference pattern best matching with the previous examination data, and selects, from the group of reference patterns, a reference pattern
15 best matching with the present examination data;
 - a distance calculating unit configured to calculate a distance between the reference pattern that is placed in the group of reference patterns and that is matching with the previous examination data, and the reference pattern
20 that is matching with the present examination data; and
 - a determining unit configured to compare the distance calculated by the distance calculating unit with a predetermined threshold, and to determine a validity in the previous-value checking based on whether the distance
25 exceeds the threshold.
2. The clinical-result confirming device according to claim 1, wherein the pattern matching unit selects, as the matching reference patterns, reference patterns having
30 smallest order of approximation to the previous examination data and the present examination data.
3. The clinical-result confirming device according to

claim 1, wherein examination data of the specimen and the group of reference patterns include image data representing results of counting blood cells.

5 4. The clinical-result confirming device according to claim 1, wherein examination data of the specimen and the group of reference patterns include waveform data representing results of analyzing protein electrophoresis.

10 5. The clinical-result confirming device according to claim 1, wherein the reference pattern group is a result of clustering by a predetermined data mining method.

15 6. The clinical-result confirming device according to claim 1, wherein the determining unit is configured to display that a re-examination for the specimen is necessary, when the validity is determined as questionable.

20 7. The clinical-result confirming device according to claim 1, wherein the reference-pattern-group storage unit includes a database configured to pre-store different reference pattern groups for each examination item for the specimen, and a reference pattern group corresponding to a desired examination item is read out from the database to
25 be used.

8. The clinical-result confirming device according to claim 1, wherein the distance calculating unit is configured to store, in advance, a distance between the
30 reference pattern matching with the previous examination data placed in the group of reference patterns and the reference pattern matching with the present examination data, in a form of a list, and to output a distance

corresponding to the reference patterns.

9. A clinical-result confirming method in which previous-value checking is performed to check a validity of present
5 examination data of a specimen used in a clinical examination, comprising:

inputting previous examination data and present examination data;

- 10 acquiring a group of reference patterns classified into a plurality of levels;

selecting, from the group of reference patterns, a reference pattern best matching with the previous examination data and a reference pattern best matching with the present examination data;

- 15 calculating a distance between the reference pattern that is matching with the previous examination data, and the reference pattern that is matching with the present examination data, in the group of reference patterns; and

- 20 comparing the distance calculated by the distance calculating unit with a predetermined threshold, to determine a validity in the previous-value checking based on whether the distance exceeds the threshold.

10. The clinical-result confirming method according to
25 claim 9, wherein the pattern matching unit selects, as the matching reference patterns, reference patterns having smallest order of approximation to the previous examination data and the present examination data.

- 30 11. The clinical-result confirming method according to claim 9, wherein examination data of the specimen and the group of reference patterns include image data representing results of counting blood cells.

12. The clinical-result confirming method according to claim 9, wherein examination data of the specimen and the group of reference patterns include waveform data
5 representing results of analyzing protein electrophoresis.

13. The clinical-result confirming method according to claim 9, wherein the reference pattern group is a result of clustering by a predetermined data mining method.
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14 The clinical-result confirming method according to claim 9, wherein the determining includes displaying that a re-examination for the specimen is necessary, when the validity is determined as questionable.
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15. The clinical-result confirming method according to claim 9, wherein the acquiring includes retrieving a reference pattern group corresponding to a desired examination item from a database configured to pre-store
20 different reference pattern groups for each examination item for the specimen.

16. The clinical-result confirming method according to claim 9, wherein the calculating includes storing, in
25 advance, a distance between the reference pattern matching with the previous examination data placed in the group of reference patterns and the reference pattern matching with the present examination data, in a form of a list, and outputting a distance corresponding to the reference
30 patterns.

17. A computer program for making a computer execute the method according to any one of claims 9 to 16.